

(No Model.)

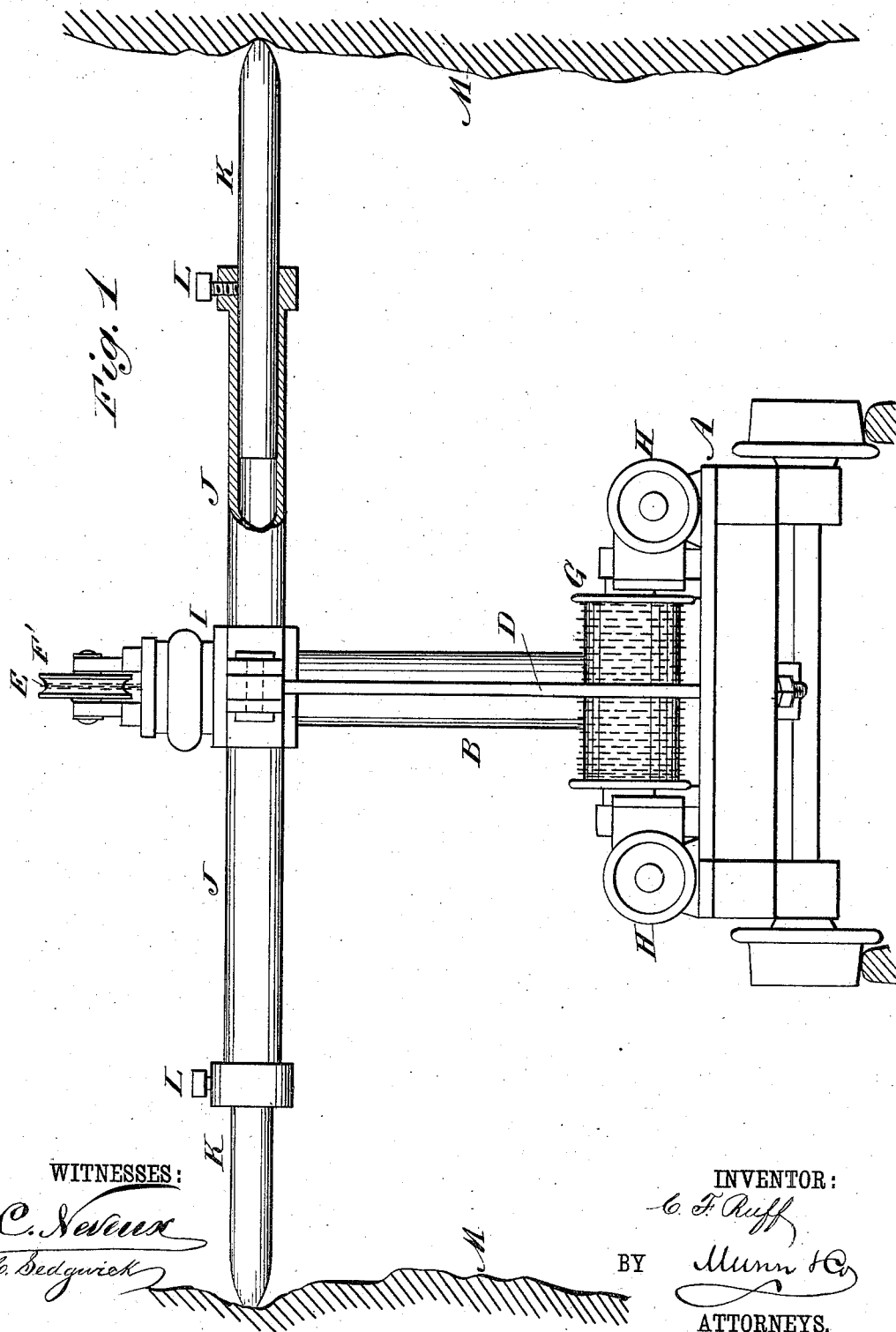
2 Sheets—Sheet 1.

C. F. RUFF.

DERRICK.

No. 305,536.

Patented Sept. 23, 1884.



(No Model.)

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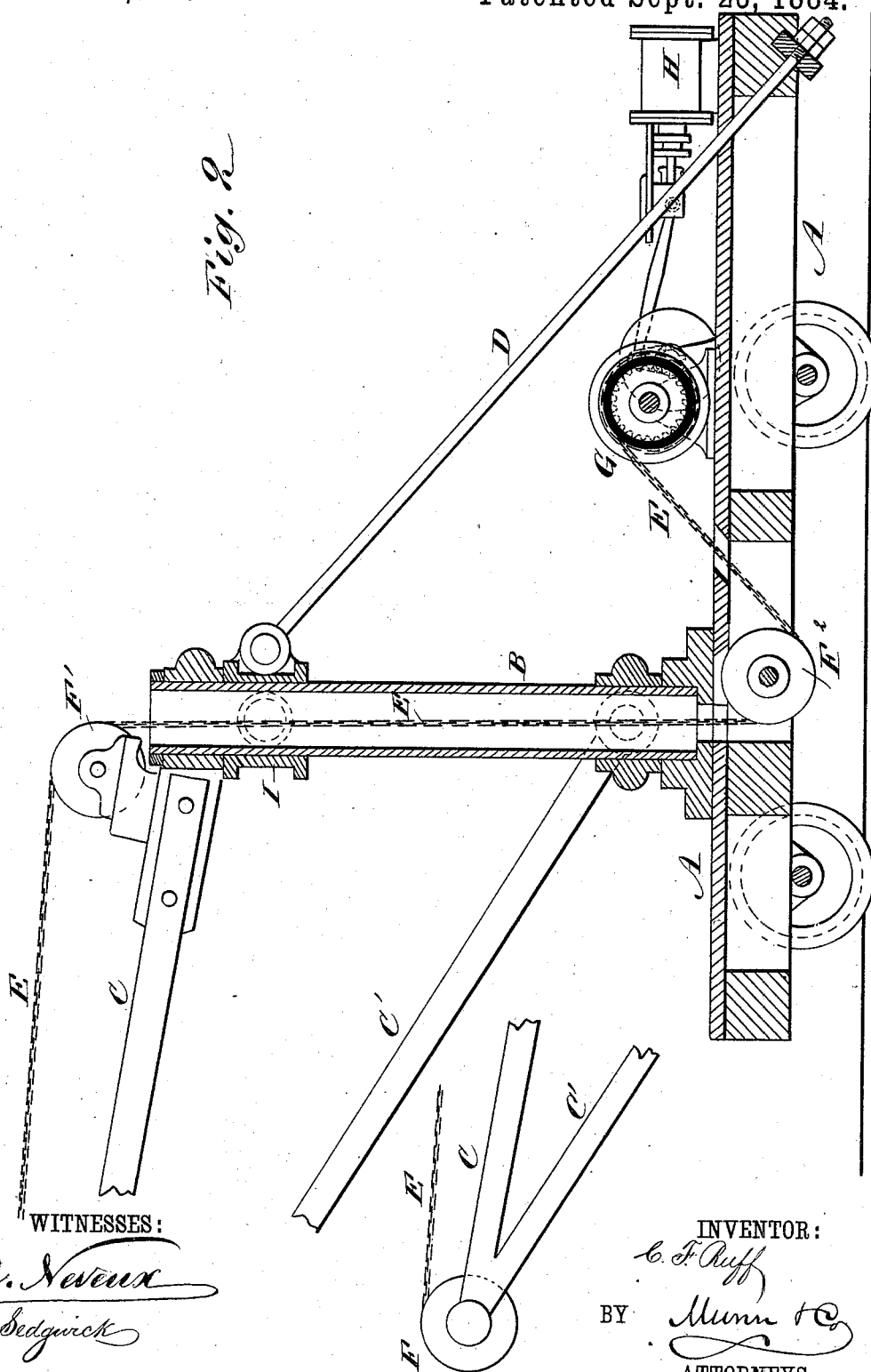
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Fig. 2.



WITNESSES :

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CHARLES F. RUFF, OF PHOENIXVILLE, PENNSYLVANIA.

DERRICK.

SPECIFICATION forming part of Letters Patent No. 305,536, dated September 23, 1884.

Application filed June 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. RUFF, of Phoenixville, in the county of Chester and State of Pennsylvania, have invented a new and Improved Derrick, of which the following is a full, clear, and exact description.

This invention relates to portable derricks designed more particularly for use in mines, tunnels, and cuts; and the invention consists, principally, in providing the derrick with adjustable braces for laterally bracing it to prevent the derrick from tipping sidewise in either direction.

The invention consists of the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a partly-sectional rear elevation of a power-derrick situated in a cut or tunnel, and having my invention applied thereto; and Fig. 2 is a central longitudinal sectional elevation of the same.

The truck A, mast B, boom C C', rear brace, D, chain E, pulleys F F' F'', winding-drum G, and power-cylinders H H may be of the ordinary or of any approved construction. In this instance the mast B is made of hollow iron, and the chain E passes from pulley F', down through the mast, to and under the pulley F'', thence to the winding-drum G, as shown in Fig. 2. Upon the mast B is formed or secured the collar I, to which are secured the side arms, J J, which are, by preference, made

hollow to receive the adjustable extensions K K, which may be moved longitudinally in and out of the arms J, and secured at any desired position by the set-screws L L, for bracing the derrick against the walls M M of a cut or tunnel, for preventing the derrick from tipping sidewise in either direction, as indicated in Fig. 1.

My invention is applicable also to hand-power derricks.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the mast of a derrick, of adjustable braces for preventing the derrick from tipping sidewise, substantially as described.

2. The mast B, provided with the side arms, J, in combination with the longitudinally-movable arms K, substantially as and for the purposes set forth.

3. The mast B, provided with the collar I, in combination with the side bracing-arms, J K, substantially as and for the purposes set forth.

4. The hollow mast B, provided with the side arms, J J, and having the chain of the derrick passing through the mast, in combination with the adjustable sections K, arranged to operate substantially in the manner and for the purpose set forth.

CHARLES F. RUFF.

Witnesses:

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